Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently amended) A three dimensional object creation system that prints objects layer by layer, wherein the system includes:

~~ing a plurality of~~at least two printheads, wherein a first printhead is actively maintained at a first temperature and a second printhead is actively maintained at a second temperature,

and wherein the system is configured to ~~printing~~ at least part of each of multiple layers simultaneously.

2.   (Original) The system of claim 1 wherein more than 100 layers are printed simultaneously.

3.   (Original) The system of claim 1 wherein a plurality of objects are simultaneously printed.

4.   (Original) The system of claim 2 wherein, when completed, the objects are substantially identical.

5.   (Original) The system of claim 1 wherein each of the layers that are at least partially printed simultaneously is for at least one different object.

6.   (Original) The system of claim 1 wherein each printhead only prints part or all of a predetermined layer.

7.   (Original) The system of claim 1 wherein at least one layer has at least two different materials.

8.   (Original) The system of claim 1 wherein at least one layer is printed by at least two printheads per layer.

9.   (Original) The system of claim 1 wherein the printheads are inkjet printheads.

10.   (Original) The system of claim 1 wherein the printheads are fixed inkjet printheads able to simultaneously print the width of the objects.

11.   (Original) The system of claim 1 wherein multiple layers of the same material are printed.

12.   (Original) The system of claim 1 including a plurality of layer groups, each layer group including at least one printhead, each of the layer groups configured to print a different layer of the objects.

13.   (Original) The system of claim 12 wherein each layer group includes a plurality of printheads.

14.   (Original) The system of claim 12 wherein each layer group prints a plurality of different materials.

15.   (Original) The system of claim 12 wherein each layer comprises rows of at least one material.

16.   (Original) The system of claim 15 wherein each row comprises voxels of at least one material.

17.   (Original) The system of claim 16 wherein the voxels of a row are created simultaneously.

18.   (Cancelled)

19.   (Original) A system as claimed in claim 1 wherein the printheads are configured to enable printing of at least two different materials in at least one layer.

20.   (Original) A system as claimed in claim 1 wherein the printheads are configured such that at least one of the layers may be printed with a first set of materials and at least one other of the layers may be printed with a second set of materials, and

wherein the first and second sets are not the same.

21.   (Original) A system as claimed in claim 1 wherein the system is configured to enable at least one first printhead that is initially configured to print at least part of a first layer to be dynamically reconfigured to print at least part of a second layer.

22.   (Original) A system as claimed in claim 1 wherein the system is configured to enable at least one first printhead that is initially configured to print at least part of a first layer to be dynamically reconfigured to print at least part of a second layer, and

> wherein if at least one printhead initially configured to print the second layer fails whilst printing said second layer, said at least one first printhead is dynamically reconfigured to complete the printing of at least part of said second layer.

23.   (Original) A system as claimed in claim 1 wherein the system includes semiconductor memory and

> wherein data defining at least one layer is stored in the semiconductor memory.

24.   (Original) A system as claimed in claim 1, the system executes a process, the system including a plurality of subsystems, each of which performs a stage of the process,

> each of the subsystems configured to perform one of a first subset of N_1 of the stages, where N is greater than 1 and to change the stage of the subset being performed on receipt of a change instruction;
> wherein, in the event that one of the subsystems fails, at least one of the remaining subsystems synchronously changes to performing the respective stage of the failed subsystem without requiring transfer of data relating the respective stage to the said at least one remaining subsystems, and
> when a subsystem changes to performing a different stage, the system reconfigures the subsystem to be capable of performing a second subset N_2 of the stages where N_1 and N_2 have the same number of stages.

25.   (Cancelled)

26.   (Original) A system as claimed in claim 1 including a least two printheads, a first one of the printheads printing a first material and a second one of the printheads printing a

second material, the first material being cured by a first method and the second material being cured by a second method and wherein the first and second methods are different.

27.   (Original) A system as claimed in claim 1 including at least one printhead for printing material to create a printed product, and

an object incorporation device that incorporates inorganic semiconductors into the product being printed whilst the at least one printhead prints the product.

28.   (Original) A system as claimed in claim 1 including at least one object incorporation device that incorporates non-printed objects into partially completed product, the non-printed objects not being printed by the system.

29.   (Original) A system as claimed in claim 1 including an object incorporation device that inserts at least one non-printed object into at least one cavity created during the printing process, the object incorporation device incorporating the at least one non-printed object into the at least one cavity during the printing of the respective printed object.

30.   (Original) A system as claimed in claim 1 including at least one printhead that prints electrical connections to at least one object incorporated in the products.